

Claims

1. Component for arrangement at an implant, with:
 - a basic component;
 - at least one sensor device arranged in the basic component for the detection of a measurement variable and for generating measuring data for the detected measurement variable;
 - a telemetry device arranged in the basic component for the transmission and/or reception of data; and
 - a data transmission connection between the at least one sensor device and the telemetry device for the transmission of data between the at least one sensor device and the telemetry device, whereby the data comprise the measuring data;where, at the basic component, assembly means for the detachable mounting of the basic component in an implant recess of an implant are formed.
2. Component according to Claim 1, **characterised** in that the assembly means comprise an assembly section for the at least partial insertion into the implant recess.
3. Component according to Claim 2, **characterised** in that, in the zone of the assembly section, a threaded section for screwing in the basic component into the implant recess is formed.
4. Component according to any one of the preceding claims, **characterised** in that the basic component has in the longitudinal section an essentially T-shaped cross-section with a head part and a base part.
5. Component according to any one of the preceding claims, **characterised** in that the at least one sensor device is arranged in the zone of the end section of the basic component and the telemetry device is arranged in the zone of the oppositely located end section of the basic component.
6. Component according to Claim 4 or 5, **characterised** in that the telemetry is essentially arranged in the head part of the basic component.
7. Component according to any one of the preceding claims, **characterised** in that, at the basic component, a receiving chamber is formed for accommodating an active

ingredient, whereby the receiving chamber is connected to an opening for discharging the active ingredient to the outside.

- 5 8. Component according to Claim 7, **characterised** by a discharge device for the controlled discharge of the active ingredient from the receiving chamber through the opening.
9. Component according to Claim 8, **characterised** in that the discharge device comprises a pump device for pumping a volume of the active ingredient from the receiving chamber through the opening.
- 10 10. Component according to Claim 8 or 9, **characterised** in that the discharge device comprises an opening mechanism for opening/closing the opening.
11. Component according to any one of Claims 8 to 10, **characterised** in that the discharge device is connected by way of a further data transmission connection to the telemetry device for the transmission of data.
- 15 12. Component according to any one of Claims 8 to 11, **characterised** by a control unit which is connected to the at least one sensor device and the discharge device in order to control in common the detection of the measuring data with the help of the at least one sensor device and the discharge of the active ingredient with the help of the discharge device.
- 20 13. Supporting implant, in particular a plate or splint consisting of a material with a high degree of rigidity, **characterised** in that, at the implant, a component is arranged according to any one of Claims 1 to 12.
14. Supporting implant according to Claim 13, **characterised** in that the component is arranged in an implant recess.
- 25 15. Supporting implant according to Claim 14, **characterised** in that the implant recess is a usable assembly recess for accommodating implant fixation devices during implanting.
16. Supporting implant according to Claim 15, **characterised** in that the implant recess has a internal thread section.

17. Substitute implant, in particular a synthetic hip, knee or shoulder joint, **characterised** in that, at the implant, a component is arranged according to any one of Claims 1 to 12.
- 5 18. Substitute implant according to Claim 17, **characterised** in that the component is arranged in an implant recess.
19. Substitute implant according to Claim 18, **characterised** in that the implant recess is a usable assembly recess for accommodating implant fixation devices during implanting.
- 10 20. Substitute implant according to Claim 19, **characterised** in that the implant recess has an internal thread section.